



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,698	08/25/2006	Darren Kidney	P30345	4508
7055 7590 04/02/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER				
BELLINGER, JASON R				
ART UNIT		PAPER NUMBER		
3617				
NOTIFICATION DATE		DELIVERY MODE		
04/02/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com

pto@gbpatent.com

Office Action Summary

Application No.

10/590,698

Applicant(s)

KIDNEY, DARREN

Examiner

Jason R. Bellinger

Art Unit

3617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the flexible members having a circumferential thickness at a free end than at the section adjacent the central annular body, as set forth in claim 35; and the flexible members having a greater thickness at the first deformable sealing elements than at the section adjacent the central annular body, as set forth in claims 36-37; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: Newly added paragraphs [0018] through [0024] are simply copies of the claims. These paragraphs should be removed from the specification, given the fact that these paragraphs do not further define the invention. furthermore, it should be noted that some of these paragraphs introduce new matter (see below).

Appropriate correction is required.

3. The amendment filed 2 January 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- Free ends of the deformable sealing elements define different diameters when in an un-installed state.
- Grooves separating the deformable sealing elements defining different diameters.
- The flexible members having a circumferential thickness at a free end than at the section adjacent the central annular body.
- The flexible members having a greater thickness at the first deformable sealing elements than at the section adjacent the central annular body.

Applicant is required to cancel the new matter in the reply to this Office Action.

None of the above features of the invention were shown in the drawings or described in the specification as originally filed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 25, 29-31, 35, and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims introduce the following subject matter, which was not shown in the drawings or described in the specification as originally filed:

- Free ends of the deformable sealing elements define different diameters when in an un-installed state.
- Grooves separating the deformable sealing elements defining different diameters.
- The flexible members having a circumferential thickness at a free end than at the section adjacent the central annular body.

- The flexible members having a greater thickness at the first deformable sealing elements than at the section adjacent the central annular body.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 13-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is indefinite due to the fact that it is unclear how an end of the limb "points away" from the central annular body; or how the sealing elements "project from" the radially inwardly pointing surface of the limbs. No directional indicators (i.e. radially, axially, etc.) have been provided to clearly define this limitation.

Claim 14 is indefinite due to the fact that it is unclear what element of the invention is used as a base or datum point for the limitation that the sealing elements "project by a same amount" from the radially inwardly pointing surface.

Claims 30 and 37 are indefinite due to the fact that it is unclear how the inner surface of the flexible members "extends" to the cylindrical inner face; or how the sealing elements are "projecting from" the inner surface "toward" the rim. No directional indicators (i.e. radially, axially, etc.) have been provided to clearly define this limitation.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 13-17, 22-23, 25-26, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738.

As best understood, the Dunlop reference shows a sealing ring for a wheel having all of the structure as set forth in the above claims, except as follows:

The Dunlop reference does not specify the dimensions of the sealing ring 5 with respect to the tire beads 3. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the sealing ring of the reference with dimensions suitable to properly function when inserted into a wheel assembly, i.e. sealing the tire against the rim.

The Dunlop reference does not specify that the deformable sealing elements (adjacent grooves 7) project from an inner surface of the flexible limbs. The German reference teaches the use of sealing elements that project from a surface of a sealing ring 4. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the deformable sealing elements of the Dunlop reference as a projection from the inner surface of the flexible limbs as an alternative configuration, in order to increase the sealing effect of the sealing ring by

allowing more surface area of the sealing elements to contact the tire beads when installed.

While the Dunlop reference as modified by the German reference does not show the grooves between the sealing elements being rounded or the free ends of the sealing elements being rounded, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the grooves and free ends in any shape, dependent upon the manufacturing process used, and the aesthetic appearance desired.

Regarding the following limitations:

- Free ends of the deformable sealing elements define different diameters when in an un-installed state.
- Grooves separating the deformable sealing elements defining different diameters.
- The flexible members having a circumferential thickness at a free end than at the section adjacent the central annular body.
- The flexible members having a greater thickness at the first deformable sealing elements than at the section adjacent the central annular body.

The Dunlop reference as modified by the German reference shows these features inasmuch as the Applicant's invention.

10. Claims 18-19, 21, 24, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738 as applied to claims 13-17, 22-23, 25-26, and 29-37 above, and further in view of Veux et al. The

Dunlop reference as modified by the German reference does not show the sealing ring 5 including a reinforcing member formed on the central annular body. In Figure 7, Veux et al teaches the use of a sealing ring having a reinforcing member 70 formed on a central body portion. This reinforcing member 70 is a radial elevation or rib on the radially outer side of the body. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing ring 5 of the Dunlop reference as modified by the German reference with a rib, for the purpose of providing reinforcement to the sealing ring, thus preventing.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 787,784 (hereafter Dunlop) in view of DE 1,021,738 and Veux et al as applied to claims 18-19, 21, 24, 27-28 above, and further in view of Medynski. The Dunlop reference as modified by the German reference and Veux et al does not show a hollow space provided in the reinforcing member. Medynski teaches the use of a sealing ring 10 having a reinforcing member 15-16 with a hollow space therein. Therefore, from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rib of the sealing ring of the Dunlop reference as modified by the German reference and Veux et al with a hollow space, for the purpose of reducing the weight of the ring without sacrificing strength or resiliency.

Response to Arguments

12. Applicant's arguments with respect to claims 13-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/
Primary Examiner
Art Unit 3617